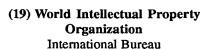
ATION PUBLISHED UNDER THE PATENT CO





(43) International Publication Date 26 February 2004 (26.02.2004)

PCT

(10) International Publication Number WO 2004/016816 A1

(51) International Patent Classification7: 3/08, 3/10, 3/20, 3/44, 23/00

C22B 3/06,

(21) International Application Number:

PCT/AU2003/001037

(22) International Filing Date: 15 August 2003 (15.08.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 2002950815

15 August 2002 (15.08.2002) AU

(71) Applicant (for all designated States except US): WMC RESOURCES LTD [AU/AU]; Level 16, IBM Centre, 60 City Road, Southbank, Victoria 3006 (AU).

(72) Inventors; and

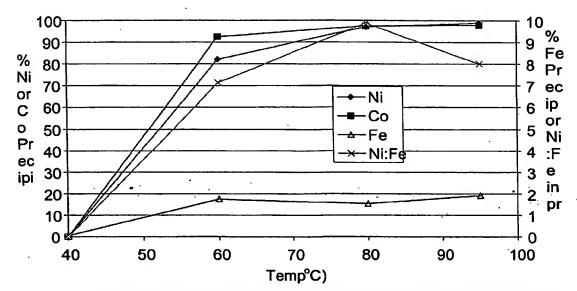
(75) Inventors/Applicants (for US only): CHAMBERLAIN, Anthony [AU/AU]; 12 Aldinga Street, Kenwick, Western

Australia 6107 (AU). TINDALL, Geoffrey [AU/AU]; 4 Tukeroo Close, Nhulunbuy, N.T. 0881 (AU). WEDDER-BURN, B, [AU/AU]; 13 Stanton Court, Glen Waverley, VIC 3150 (AU).

- (74) Agent: GRIFFITH HACK; 50 St Kilda Road, Melbourne, Victoria 3004 (AU).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE; IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: RECOVERING NICKEL



Ni, Co and Fe Precipitation After 1 hour verses Temperature

(57) Abstract: A process for recovering valuable metals from laterite ores and concentrates that are contaminated with iron is disclosed. The process includes reducing ferric ions to ferrous ions in a leach liquor containing a valuable metal and iron in solution using a reductant, neutralising the liquor to reduce the free acid concentration in solution to levels suitable for nickel precipitation; and precipitating the valuable metal using the reductant and seed particles under process conditions, including one or more of seed particle size, seed composition, and temperature, that are selected to maximise nickel precipitation and to minimise iron precipitation.

